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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/579,395	12/27/1995	WILLIAM H. SWAIN		4200

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EXAMINER
KARLSEN, ERNEST F

ART UNIT	PAPER NUMBER
2829	

DATE MAILED: 01/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 08/579,395	Applicant(s) SWAIN, WILLIAM H.	
	Examiner Ern st F. Karlsen	Art Unit 2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 November 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *32-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *32-66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1. In Paper No. 29 the examiner stated:

"In response to requirements to elect Applicant has argued that there are no patentably distinct inventions or species. Therefore, the Restriction Requirement of October 31, 2001 is withdrawn. Applicant states "my traverse relies on the fact that the basic concept (claim 14) is in every claim so no claim would be patentable over another because it would lack novelty outside of this application". This argument was made most recently in Paper No. 28 filed December 18, 2001. Current claim 45 is essentially the same as claim 14".

When a requirement to restrict is in place, Applicant argues that all claims are claiming the same thing and when a restriction is not in place Applicant argues that all claims are different. In Paper No. 32 Applicant argues that the claims are different and refers to species. Previously Applicant has argued that there are no species and that all is the same. The Examiner holds to Applicants statement in Paper No. 28 quoted above.

2. By Applicant's admission if claim 45 is not patentable no claim of the present application is patentable.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

4. (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 32-66 are rejected under 35 U.S.C. 102(b) as being fully anticipated by any one of Lee, Moser et al, Hubbard, Sweeny or Swain.

By Applicant's admission in Paper No. 28 the fate of claim 45 determines the fate of all claims so only claim 45 is discussed. Looking at Figure 4 of Sweeny, as an example, winding 45 senses a current applied by the source connected to winding 45. Winding 46 responds to the flux in the core 44 and produces a voltage that is applied to resistance 20. If a magnet were placed adjacent the core 44 it would cause undesired interference or "noise". Lines 4-13 of claim 45 deal with definition of signal-to-noise ratio and are not considered to add substance to claim 45. Lines 14 to 18 of claim 45 require that the signal-to-noise ratio of the sensor be substantially altered by changing an operating parameter and also require a means enabling the sensor to substantially increase its signal-to-noise ratio. In Figure 4 of Sweeny winding 47 applies a direct current bias to the core 44 which will change the signal-to-noise ratio. Moving the tap of variable resistor 24 in a first direction will increase the signal to noise ratio and moving the tap in the opposite direction will decrease the signal-to-noise ratio. Applicant has stated in his specification that changing the bias on a saturable core device will change the signal-to-noise ratio.

Swain uses the same kind of core material as used in the present application and will thus inherently have the "essential characteristic".

Applicant has responded to the above rejection as if it were based on 35 U.S.C. 103. The rejection is based on 35 U.S.C. 102 on any one of the listed references taken individually. The apparatus of Sweeny has Applicant's essential characteristic in that if a magnet were placed

adjacent the core 44 in a position to produce a field in the core 44 opposite in direction to the direction of the field produced by winding 47 increasing the field produced by winding 47 would negate the effect of the magnet and improve coupling of the signal source to the load 20. What Applicant calls signal to noise ratio would be improved.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Karlsen/ek

01/21/03

ERNEST KARLSEN
PRIMARY EXAMINER